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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,975	10/25/2005	Richard Schneider	01309.0008.PC/US00	7986
32894	7590	12/09/2008		
HOWREY LLP-EU				
C/O IP DOCKETING DEPARTMENT				
2941 FAIRVIEW PARK DR., SUITE 200				
FALLS CHURCH, VA 22042				
EXAMINER				
TRAN, DALENA				
ART UNIT		PAPER NUMBER		
3664				
MAIL DATE		DELIVERY MODE		
12/09/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/526,975

Applicant(s)

SCHNEIDER ET AL.

Examiner

Dalena Tran

Art Unit

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10526975	10/25/05	SCHNEIDER ET AL.	01309.0008.PCUS00

HOWREY LLP-EU
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2941 FAIRVIEW PARK DR., SUITE 200
FALLS CHURCH, VA 22042

EXAMINER

Dalena Tran

ART UNIT	PAPER
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3664

20081206

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 10/14/08. Claims 1-14 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, and 3, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, the following is unclear:

line 1, “the state of a vehicle chassis”, it is unclear as to what state of vehicle chassis.

line 4, “providing a model of the vehicle which continuously identifies parameters,” it is unclear what parameter or value defined the model, and what parameters of the vehicle being identified.

line 5, “continuously compile modeled variables”, it is unclear, what type of value represents “modeled variables”

line 6, “simulatory prognosis of the vehicle behaviour”, it is unclear, prognosis what type behaviour of vehicle.

line 7, it is unclear as to what difference between “measured variables” and “modeled variables”, and what types of vehicle values or parameters in “measured variables” and “modeled variables.”

line 8, it is unclear as to what is “specific variables”, and what type of values in the “specific variables”.

line 9, “performing a classification into classes or causes”, it is unclear, what type of classes or causes is being classified, and what type of parameter or values in the classification.

line 11, “evaluating a result of the classification”, it is unclear, what result is being evaluated in the classification.

As per claim 3, line 3, it is unclear what is critical state; also, lines 3-4, what value or parameter represents “damage evolution” and “ageing model”.

Clarification is needed for all of the above.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, and 8-14, are rejected under 35 U.S.C. 102(e) as being anticipated by Marko et al. (6745151).

As per claim 1, Marko et al. disclose a method for monitoring the state of a vehicle chassis, the method comprising: measuring physical variables on the chassis by means of sensors (see columns 6-7, lines 28-16; and column 10, lines 30-51), providing a model of the vehicle which continuously identifies parameters of the vehicle and uses such parameters to continuously compile modeled variables in a simulatory prognosis of the vehicle behavior (see at least column 5, lines 35-42; and columns 7-8, lines 17-39); comparing the measured variables with the modeled variables by means of a processing unit, wherein the modeled variables are determined from specific variable performing a classification into classes of causes on the basis of the comparison and evaluating is a result of the classification (see columns 4-5, lines 33-34).

As per claim 3, Marko et al. disclose determining or updating a remaining lifetime of vehicle components before a critical state is reached or before a maintenance measure is needed, using at least one damage evolution or ageing model of the vehicle components (see columns 3-4, lines 34-8; and column 5, lines 35-65).

As per claims 4-5, Marko et al. disclose the comparison of the measured variables and the modeled variables is made by means of a correlation, and the classification is performed by means of the processing unit (see columns 4-5, lines 33-34).

As per claim 8, Marko et al. disclose the modeled variables are calculated (see columns 7-8, lines 18-39).

As per claim 9, Marko et al. disclose a device for monitoring the state of a vehicle chassis, in comprising: one or more sensors for measuring physical variables on the chassis (see columns 6-7, lines 29-16; and column 10, lines 30-51); a processing unit for calculating modeled variables, by continuously identifying vehicle parameters and continuously compiling a

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simulatory prognosis of the chassis behavior using a model of the chassis for comparing the measured variables with the modeled variables (see at least column 5, lines 35-42; and columns 7-8, lines 17-39) and for classifying as a result of the comparison; and means for evaluating the classified results (see columns 4-5, lines 33-34).

As per claim 10, Marko et al. disclose the processing unit comprises: at least one damage evolution or ageing model of chassis components which is used to determine or update a remaining lifetime before a critical state is reached or before a maintenance measure is required (see column 5, lines 35-65).

As per claims 11-12, Marko et al. disclose an interface to a superordinate control system of the vehicle is connected to the processing unit, via which data on an actual driving state is delivered to the processing unit or messages therefrom may be saved and may be transmitted to a driver or traction unit conductor or an external control centre, and at least one sensor is a vibration sensor, an acceleration sensor, an impact sensor, an acoustic sensor, a sound sensor, an eddy current sensor, a magnetic field sensor, a temperature sensor, a force sensor, an strain sensor, a distance sensor, a radar Doppler sensor or an ultrasound sensor (see columns 5-6, lines 66-37).

As per claim 13, Marko et al. disclose at least one sensor is arranged on a component selected from the group consisting of: on a wheelset, a wheelset axle, wheelset bearing, on a bogie, a chassis frame, on a primary spring suspension, a spring, a shock absorber, a wheelset guide, a secondary spring suspension, a stabilizer, a stop buffer, a traction linkage, on a drive, a drive motor, a gear, a clutch, a drive suspension, a brake, a brake disk, a brake cylinder, a brake lining, a brake pad, a brake linkage, and a brake caliper (see columns 4-5, lines 33-34).

As per claim 14, Marko et al. disclose the means for evaluation comprise a signaling device inside the vehicle or a signaling device in a mobile or stationary control centre outside the vehicle including a data transmission device from the vehicle to the control centre (see columns 5-7, lines 66-16).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, and 6-7, are rejected under 35 U.S.C.103(a) as being unpatentable over Marko et al. (6745151) in view of Bidaud (6681160).

As per claim 2, Marko et al. do not disclose speeds, acceleration, or forces are measured as physical variables. However, Bidaud discloses speeds, acceleration, or forces are measured as physical variables (see columns 8-9, lines 32-38; column 16, lines 7-42; columns 18-19, lines 25-19; and columns 19-20, lines 33-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Marko et al. by combining speeds, acceleration, or forces are measured as physical variables for monitoring vehicle operation state.

As per claims 6-7, Bidaud discloses the classification is made as to whether a cause inside the vehicle or an external cause is involved (see columns 12-13, lines 34-50; and columns 16-17, lines 43-24).

Remarks

7. Applicant's amendment filed on 10/14/08 has been fully considered, but they are not persuasive. Marko et al. system does continuously identifies parameters of the vehicle and uses such parameters to continuously compile modeled variables in a simulatory prognosis of the vehicle behavior, because Marko et al. disclose the vehicle data is captured and analyzed for trend behavior, the information gathered and its frequency of capture are dependent upon the behaviors of each specific vehicle system (column 5, lines 35-42), it is obvious, "vehicle data is captured and analyzed for trend behavior" represents a model identifies parameters of vehicle behavior. Therefore, the references cited still read the claimed invention.

Upon reviewing the claim languages, the new ground of rejection under 35 U.S.C. 112, second paragraph as above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-W (in a first week of a bi-week), and T-R (in a second week of bi-week) from 7:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dalena Tran/
Primary Examiner, Art Unit 3664
December 6, 2008

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